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Service learning experiences of doctor of physical therapy students with a severe mental illness population

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Abstract:

INTRODUCTION: Physical therapists provide important services to improve physical health for the general population; however, physical therapy interventions are less utilized with underserved populations such as those with severe mental illness (SMI). The quality of services for these populations is impacted in part by negative provider attitudes and lack of preparation to work with the SMI population. This study examined the impact of structured educational field experience on the physical therapist's attitudes and knowledge about working with the SMI population. This will inform future educational practices to best prepare students to provide quality of healthcare to the population.

MATERIALS AND METHODS: Seven graduates of a doctor of physical therapy (DPT) program from a Mid-Atlantic University in the United States who participated in an SMI service-learning (SL) experience completed a semi-structured qualitative interview in 2016. Questions about how the experience impacted their current work were asked. Interviews were digitally recorded, transcribed, and examined using interpretive phenomenological analysis. Coding and investigator triangulation were conducted. All interviews reached thematic saturation.

RESULTS: The graduated DPT students reported attitudinal changes toward people with SMI through qualitative interviews. They reported an improvement in their skills, greater competence to work with the SMI population, and an increased focus in the use of person-centered services.

CONCLUSIONS: The results of this study suggest that DPT students gain an understanding of both the SMI population and themselves during SL. Using SL as part of the DPT educational curriculum can offer students and the opportunity to build confidence in working with the SMI population. SL can also improve their skills and attitudes toward the population, key areas that are identified as barriers to receiving quality physical healthcare among the SMI population.

Keywords:

Community health services, physical therapy, psychiatric rehabilitation, qualitative research, students

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Introduction

Physical therapists (PT) are leading health-care providers in the delivery of physical activity interventions for conditions such as diabetes and cardiovascular disease among the general population,[1] but this does not seem to extend to underserved populations such as individuals with severe mental illness (SMI) who have higher rates of physical health problems and a mortality rate two to three times that of the general population.[2-4] To effectively work with the SMI population, physical therapy students need specialized education and experience.

Currently, course content and training specific to SMI is often limited in PT curricula.[5,6] This is particularly relevant because physical therapy professionals can be susceptible to the same factors that contribute to the poorer quality of health-care provided by other practitioners,

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namely stigmatizing attitudes[7-9] and the lack of specialized knowledge needed to work effectively with individuals with SMI.[10] Practitioner attitudes are shown to directly correlate with the quality of physical healthcare being delivered.[11,12] Providers who believe the physical health concerns of people with SMI are directly caused by their SMI provide a lower quality of physical healthcare.[13] The quality and quantity of academic coursework can influence students' perceptions of working with individuals with SMI[14-16] and can have a positive impact on attitudes.[17,18]

A promising educational approach to positively influence attitudes toward individuals with SMI is service-learning (SL). SL is an experiential learning approach that combines educational objectives with field experience in a community setting that benefits both the student and individuals in the community with whom they work.[19] SL focuses on the students' understanding of social issues of underserved populations, gaining personal insight to understand their own bias and develop acceptance of differences, and promoting cognitive development.[20] This understanding of self and the population assists with overcoming negative attitudes and increases students' ability to work with underserved populations.[12,21]

Physical therapy students who performed SL with underserved populations reported positive changes in their professionalism, compassion and caring for the client, use of a person-centered approach, ethical work, and understanding of professional duties and social responsibility to provide quality healthcare.[22] While SL for PT students has been explored with several underserved populations (i.e., older adults and ethnic minorities), it has not been assessed in the context of working with people with SMI in the United States.

Survey research with bachelor-level physiotherapy students outside of the US found that they had moderately positive attitudes toward people with SMI. They also found that prior experience with SMI (either personally or through a relationship with someone with SMI) was associated with more positive attitudes.[17,23] The authors were unable to locate qualitative perspectives of doctoral-level physical therapy students in the United States.

To best address attitudes and ultimately improve access and quality of care, more information is needed from the student perspective about working with this clientele. This novel examination of physical therapy students working with individuals with SMI in SL settings can explore the understanding of student perceptions to shape educational strategies designed to integrate SL initiatives with the highly stigmatized populations of people with SMI. Physical therapy students are important to address because of the high likelihood that they will interact with individuals with SMI in future practice and offer services needed to improve movement and functional health. Physical therapists can provide key services with the population, which may increase the overall physical health for individuals with SMI.

Previous work in medical education has explored student perceptions of a specialized educational methodology phenomenological qualitative approaches.[24] Based on previous research findings, the current study utilized an SL framework to provide an initial examination of a structured educational and field experience opportunity with a doctor of physical therapy (DPT) in the United States. Understanding student experience and perceptions will inform future curriculum to best prepare the students to work with underserved populations.

Materials and Methods

Design

This study received ethical approval from the authors' University Institutional Review Board (20160000276). The study was performed at a Mid-Atlantic University in the United States. The study used a semi-structured interview approach to understand the participants' perceptions and experiences after working with people with SMI as part of the SL experience. The questions in the interviews were created from a review of previous research about the experience of participating in SL with underserved populations [Interview questions presented in Table 1]. Interviews were conducted via video conferencing by two of the authors (AM, SK). Being exploratory in nature, a qualitative assessment of the impact of this SL experience on attitudes toward working with individuals with SMI and experiences postgraduation among graduates of a DPT program who participated in the SL project while students are used. Qualitative assessments are used to understand feelings and reason for actions that quantitative measures are unable to ascertain.[25] Qualitative results are often used as a first step to inform quantitative measures when little information is available on a given topic.[24] This article focuses on the participants' impressions of how their experiences during SL impacted their attitudes and current work.

Participants

A total of 35 individuals were identified as graduates of a DPT who participated in the SL activities while a student and were potential participants in the study. Recruitment e-mails were sent to the 35 graduate

students. A total of seven individuals participated in the semi-structured qualitative interviews, which took place in the summer of 2016. Recruitment for additional participants was stopped after seven interviews as thematic saturation was reached. Several cohorts of students participated in SL between 2009 and 2014; the study participants were involved in at least one of those cohorts (three participants were involved in one cohort and four participants in two). Students had a mean age of 30.43 years old (standard deviation = 2.88), were primarily female (n = 6, 85.7%), and were currently working in outpatient settings (n = 4, 57.1%), pediatric settings (n = 2, 28.6%), and acute care settings (n = 1; 14.3%).

Service-learning program

The SL program included participation in an 8-week inter-professional health promotion intervention for people with SMI living in the community (see[26] for more information about the Wellness for Life (WFL) intervention and its outcomes). The PT students led, under the direction of a licensed physical therapist, a weekly 30-min group physical activity program with individuals with SMI in a community mental health program. In addition to engaging with people with SMI through the group physical activity program, students were assigned readings related to people with SMI and their health concerns and barriers and participated in weekly debriefing sessions with a licensed PT and/or a participating mental health professional regarding their experiences.

Data analysis

The research team used a three-step, interpretive phenomenological analysis (IPA) to analyze the qualitative interviews. Since most of the researchers participated in the WFL groups and played an active role in the process, the IPA method was an effective way to analyze the data.[27-30] Table 2 shows an explanation of the IPA performed.[31,32] Open-ended semi-structured interview questions were utilized to guide the conversation [Table 2].

Table 1: Semi-structured interview questions

Demographic question
1. When did you graduate?
2. What is your age?
3. When were you a part of the WFL project?
4. In how many different locations did you participate in WFL? Which locations?
Questions about current work
1. Where do you work?
2. What is your job title now?
3. What are your job responsibilities?
4. What population(s) do you work with?
5. After your experience in WFL, what is your perception of people with serious mental illness?
6. In what ways did your experience with WFL influence your interactions in your current position?
7. How has your experience with WFL impacted your willingness to work with clients with serious mental illnesses?
8. What was the most important thing you took away from the experience?
9. Is there anything else about this experience you'd like to share?

WFL=Wellness for Life

Table 2: Interpretive phenomenological analysis

Step 1: Each researcher read the first transcript multiple times to become immersed in the text.[27,29] By doing this, the researchers were able to explore the true essence of the participants' words and allow them to guide the analysis process[30]
Step 2: Each researcher individually conducted a line-by-line coding process in which single meaning units were generated.[28] Throughout this step, the researchers continued to reflect upon the research question while generating meaning units to ensure the data analysis directly answered the research question.[29] The researchers continued this step for the remainder of the interviews. Researchers then utilized investigator triangulation by meeting confirm the findings, add breadth to the phenomenon of interest, and ensured thematic saturation was reached
Step 3: The researchers reviewed all the meaning units from the seven interviews and identified emerging themes that addressed the research question[29]

Results

The present study yielded ten categories and four main themes that were extracted from the interviews and presented in Table 3. There were four major themes that arose from the data regarding the perceived impact of the SL experience on participants' attitudes and careers: (a) attitudinal changes, (b) improvement in skills, (c) increase in competence, and (d) greater focus on person-centeredness. All themes are presented below and supported by direct quotes from the participants in relation to their experiences with the SL program [Table 3].

Discussion

This study qualitatively explored the attitudes and experiences of graduates from a DPT program after an SL experience with people with SMI. Participants' responses about their participation in the SL experience reflected changes in their attitudes toward people with SMI, improvements in skills and the need for individualized services, and a greater sense of competence. Participants reported a greater understanding of SMI and its prevalence and impact that they attributed to participating in the SL experience. They also developed a greater sense of hope and optimism toward the potential impact of PT interventions for people with SMI and a more accepting attitude.

Participants were able to practice, learn, and advance their professional skills to deliver services to people with SMI. They highlighted the improvements the

Table 3: Student attitudes after participating in service-learning with the individual with severe mental illness

Theme	Codes	Category	Student experience
Attitudinal changes	Anybody can have a severe mental illness, client change, severe mental illness barriers, student's personal growth, stigmatizing attitudes	Understanding of client barriers	"I think it's something that more people deal with than most people recognize. Since then, I understand it a little bit more, that it's a struggle that continues on through life and something that (has) a lot of impact"
		Sense of hope for clients	"I know that (people with a severe mental illness) are capable of doing more than you would think"
			"You can't think of it as a crutch or something like that. It is just something to take into consideration with your therapy, but it shouldn't ever sway you from doing something or interacting with someone or taking on that case"
		Reduction in stigmatizing attitudes	"I'm not as judgmental as otherwise I would be. It definitely prepared me (better) than other people who are just used to the regular outpatient population… People with a severe mental illness can still exercise and participate in society and they want to and they enjoy that"
Improvement in skills	Student's skill building, communication, student's teaching and facilitation style, intervention types	Communication skills	I try to figure the best way to speak to them and to connect with them so that I can help them get the best benefit from physical therapy… Making sure that you're clear with your directions as well as with your explanations of what it is that you're going to be doing and why you're going to be doing it, so clarity as well as tone of voice"
		Patience and understanding	"I think just having more patience with people… knowing that people may be in a very different life situation"
			"They need help and we just need to give them extra time when working with them"
			"(Sometimes) rushing in and out of people's rooms is not helpful so sometimes even though I'm a physical therapist and I should be getting them moving, sometimes I just have to pull up a chair and just talk to them for 5 min"
Increase in competence	Learning about severe mental illness and other populations, student's professional growth and career preparation, student gaining experience, willingness to work with severe mental illness population	Confident and better prepared to work with severe mental illness clients	"Having a greater understanding of the population and again feeling much more comfortable with working with them, because maybe if had I been a new grad going out there and on my first affiliation, I'd get someone who was listed as having a severe mental illness and I might have been a little bit taken back or a little bit okay I'm not sure what to expect, what to do and I think it did definitely help me with that comfort level"
		Sense of empowerment	"I've had a few patients come in (who we knew had a severe mental illness) and people come to me for questions about how I've handled it in the past"
		Able to use learned knowledge from service learning experience	"There's definitely not as many limitations as I thought there would be. Unfortunately, the medication side effects really do play a big role in it…I think that does definitely play a part in their physical therapy. I was happy to understand that and be able to share that information with my peers"
Greater Focus on Person Centeredness	Adapting intervention for individualized services, practitioner impact, importance of physical activity	Understanding the need to focus on individual needs	"You're coaching them through things. I think that's the biggest thing, even learning how to connect with somebody. Finding out what motivates them and kind of using that to help them accomplish a goal as far as physical exercise and well-being"
		Complexity of each individual	"Adapting your exercises based on each patient, individually tailoring things to keep up their confidence. Because sometimes you try to get your patient to do something - it might be a little too challenging and you see them kinda like knock them down or they kinda get discouraged or if they have a low frustration level"

SL experience had on their communication skills, emphasizing the benefits of providing clear, easy to understand instructions to their clients. In addition, participants reported an increase in their patience and an understanding of the importance of taking time to build a trusting relationship with clients. Participants also emphasized the importance of tailoring and adapting their interventions to both meet the individual needs of the client and leverage the client's motivation. This person-centered approach is key to working with the SMI population who have often complained of receiving the poorer quality of care, not being listened to, and feeling marginalized and labeled by health care providers, which contribute to a reduction in help-seeking behaviors.[9,15]

Participants expressed an increased level of comfort in providing services to people with SMI and a belief that they were able to make a positive impact on their clients following the SL experience. Participants also reported they felt competent in their abilities to deliver quality services but also to serve as a resource to their colleagues regarding working with the SMI population. This is a stark shift from previous literature, in which providers report a lack of willingness to work with individuals with SMI.[9,15]

These findings support previous SL research with PT students and disadvantaged populations, which has similarly found increases in understanding, compassion,

and person-centeredness.[22] This study expands on previous research by assessing the impact of SL on student attitudes towards and skills working with people with SMI. This is a promising outcome as people with SMI have higher rates of obesity, heart disease, and diabetes[33] conditions for which treatment plans should include physical activity supported by a PT. As is seen among various health-care providers, stigmatizing attitudes toward people with SMI can get in the way of the most effective health treatment.[8-12] SL has been shown to positively impact student attitudes and understanding toward individuals who may otherwise be stigmatized or marginalized. Its application to the education of physical therapists and other health-care providers who can provide services for people with SMI is particularly critical considering the alarmingly high rates of treatable health conditions, low rates of physical activity, and early mortality.[3] SL should be considered as an addition to PT education to enhance attitudes and competence toward the treatment of people with SMI.

While not reflected in the results of the qualitative interviews reported here, it is also important to note the positive impact the PT participants had on the individuals with SMI who participated in WFL. Individuals with SMI participating in WFL gained positive experience with physical activity and with the students serving as their health-care providers potentially impacting their expectations regarding future interactions with providers. Educating PT students to work with the SMI population provided mutual benefit for the students and the individuals they worked with.

Conclusions

This study is aimed to explore the attitudes and experiences of DPT students after providing services with people with SMI. One limitation of this study was the small sample size from one PT program, limiting the generalizability of the findings.

Suggestions

Incorporating education about the SMI population and practice opportunities working with people with SMI can benefit PT students' ability to deliver services to both SMI and non-SMI clients. SL approaches can create PT professionals who are well prepared to work with a population who requires their services. Students who complete SL programs have reduced stigmatizing attitudes; an understanding of the social issues experienced by the population, enriched personal insights, and enhanced professional skills.

Additional exploration should focus on the manualization of PT education and SL experiences related to people with SMI. Providing a structured SL experience in PT education adds value to the program, its students, and the clients they will serve in future. Additional research should also be conducted examining provider support for exercise among individuals with SMI to create more targeted physical activity interventions.

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Conflicts of interest

There are no conflicts of interest.

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